IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

JHU/APL Docket No.: 1550-SPL

Serial No.: PCT/US01/11170

International Filing Date: 5 April 2001

Title: Structure Including a Plurality of Cells of Cured Resinous Material, Method of Forming the Structure and Apparatus for Forming the Structure

Applicant: THE JOHNS HOPKINS UNIVERSITY

PRELIMINARY AMENDMENT FOR FILING UNDER 35 USC 371

Assistant Commissioner for Patents
Box PCT
Washington, D.C. 20231

Dear Sir:

Please amend the above-identified application as follows:

In the Specification:

Page 1, line 5, please insert a Cross-Reference to Related Applications paragraph as follows:

--CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of International Application No. PCT/US01/11170, filed April 5, 2001 which claims the benefit of prior filed co-pending U.S. Application No. 60/196,027, filed on April 7, 2000.--

Claims 1-48 remain in the application.

A "Clean Version" of page 1 is enclosed.

Respectfully submitted,

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Enclosure: Specification, page 1, "Clean" version

CLEAN VERSION

1550-SPL

STRUCTURE INCLUDING A PLURALITY OF CELLS OF CURED RESINOUS MATERIAL, METHOD OF FORMING THE STRUCTURE AND APPARATUS FOR FORMING THE STRUCTURE

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of International Application No. PCT/US01/11170, filed April 5, 2001 which claims the benefit of prior filed co-pending U.S. Application No. 60/196,027, filed on April 7, 2000.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a structure that may be formed of a plurality of resinous cells, a method and an apparatus for forming such a structure. The structure may be formed in place where it is to be utilized.

2. Description of Related Art

In many situations, it may be desirable to form a structure in place where it is to be utilized. Sometimes, a structure is preformed and then assembled in place. One proposed application of such structures is in outer space. For example, it has been proposed to form spacecraft or portions of spacecraft from prefabricated inflatable structures. Prefabricated inflatable structures have also been proposed for forming structures on other celestial bodies, such as moon bases and underground caverns. Such structures have also been proposed for use in terrestrial applications.

Space-based structures that are assembled and/or formed in place can include a plurality of layers of material with various functions. In the context of a spacecraft, the structures can include layers for meteorite resistance, gas retention for inflatable structures, layers for helping the structure to maintain its shape, layers to help retain heat, and/or layers for other functions.

Space based structures have been proposed that are prefabricated and then inflated in space. For example, satellites have been proposed and deployed, which include an inflatable structure. According to one example, the satellite referred to as Explorer XIX, which was